AMENDMENTS TO THE CLAIMS

Please cancel claims 1-35 without prejudice.

36. (New) A method for fabricating a medical lead comprising:

providing a body member having a wall, a proximal end and a distal end, and having a conductor within the wall and extending between the proximal end to the distal end;

forming a first opening in the wall leading to the conductor;

forming a second opening in the wall leading to the conductor;

forming a first conductive link through the first opening to electrically connect to the conductor;

forming a second conductive link through the second opening to electrically connect to the conductor;

forming an electrode onto a surface of the body member to electrically connect to the first conductive link and the second conductive link.

37. (New) The method in accordance with Claim 36 wherein forming a first conductive link further comprises applying a conductive epoxy in the first opening, and forming a second conductive link further comprises applying a conductive epoxy in the second opening.

38. (New) The method in accordance with Claim 36 wherein forming a first conductive link further comprises electroplating metal in the first opening to form the first conductive link, and

forming a second conductive link further comprises electroplating metal in the second opening to form the second conductive link.

39. (New) The method in accordance with Claim 38 wherein electroplating metal in the first opening and electroplating metal in the second opening further comprise:

connecting the conductor at a proximal end thereof to a DC voltage source and submerging at least the first and second openings in a plating bath including ions of a selected metal.

40. (New) The method in accordance with Claim 39 wherein the selected metal comprises metal selected from a group consisting of gold, silver, platinum, platinum-iridium, and titanium.

41. (New) The method in accordance with Claim 36 wherein providing the body member further comprises extruding the body member having an inner lumen, and the method further comprises:

wrapping the conductor about the body member in spiral relation; and

embedding the conductor in the wall of the body member.

42. (New) The method in accordance with Claim 36 wherein the first opening and the second opening are formed by laser etching.

43. (New) The method in accordance with Claim 36 wherein forming the electrode further comprises:

depositing a thin film electrode.

44. (New) The method in accordance with Claim 43 wherein depositing further comprises depositing a first layer and depositing a second layer.

45. (New) The method in accordance with Claim 36 wherein the body member comprises a second conductor within the wall and extending between the proximal end to the distal end, and the method further comprises:

forming a third opening in the wall leading to the conductor;

forming a fourth opening in the wall leading to the conductor;

forming a third conductive link through the third opening to electrically connect to the second conductor;

forming a fourth conductive link through the fourth opening to electrically connect to the second conductor; and

forming a second electrode onto a surface of the body member to electrically connect to the third conductive link and the fourth conductive link.

46. (New) A method for fabricating a medical lead comprising:

providing a body member having a wall, a proximal end and a distal end, and having a conductor within the wall and extending between the proximal end to the distal end;

boring a first opening in the wall leading to the conductor;

electroplating a first conductive link in the first opening to electrically connect to the conductor; and

forming an electrode onto a surface of the body member to electrically connect to the first conductive link.

47. (New) The method in accordance with Claim 46 wherein electroplating the first conductive link comprises:

connecting the conductor at a proximal end thereof to a DC voltage source and submerging the first opening in a plating bath including ions of a selected metal.

48. (New) The method in accordance with Claim 47 wherein the selected metal comprises metal selected from a group consisting of gold, silver, platinum, platinum-iridium, and titanium.

49. (New) A method for fabricating a medical lead comprising:

extruding a body member having a wall, a proximal end and a distal end;

spirally winding a conductor into the wall, the conductor extending from the proximal end to the distal end;

heating the extruded body member to embed the conductor into the wall;

creating a first opening in the wall leading to the embedded conductor;

creating a second opening in the wall leading to the embedded conductor;

forming a first conductive link through the first opening to electrically connect the embedded conductor to an outer surface of the body member;

forming a second conductive link through the second opening to electrically connect the embedded conductor to the outer surface of the body member; and

forming an electrode onto the outer surface of the body member to electrically connect to the first conductive link and the second conductive link.

50. (New) The method in accordance with Claim 49 wherein forming the first conductive link further comprises applying a conductive epoxy in the first opening, and forming the second conductive link further comprises applying a conductive epoxy in the second opening.

51. (New) The method in accordance with Claim 49 wherein the first conductive link and the second conductive link are formed by electroplating.

52. (New) The method in accordance with Claim 49 wherein the extruding yields a body member having an outer diameter in a range of from 0.010 inch to 0.065 inch and an inner diameter in a range of from 0.005 to 0.040 inch.

53. (New) The method in accordance with Claim 49 wherein the first opening and the second opening are formed by laser etching.

54. (New) The method in accordance with Claim 49 wherein spirally winding the conductor further comprises:

spirally winding a second conductor into the wall, the second conductor extending from the proximal end to the distal end;

spirally winding a third conductor into the wall, the third conductor extending from the proximal end to the distal end; and

spirally winding a fourth conductor into the wall, the fourth conductor extending from the proximal end to the distal end.

55. (New) The method in accordance with Claim 54 wherein spirally winding further comprises winding the conductors about the body member at an angle between about 10 degrees to about 80 degrees from a longitudinal axis of the body member.

56. (New) A method for fabricating a medical lead comprising:

extruding a body member having a wall, a proximal end and a distal end;

spirally winding a conductor into the wall, the conductor extending from the proximal end to the distal end;

heating the extruded body member to embed the conductor into the wall;

creating a first opening in the wall leading to the embedded conductor;

electroplating material within the first opening to form a first conductive link for electrically connecting the embedded conductor to an outer surface of the body member; and

forming an electrode onto the outer surface of the body member to electrically connect to the first conductive link.

57. (New) The method in accordance with Claim 56 wherein electroplating material the first opening to form a first conductive link further comprises:

connecting the conductor at a proximal end thereof to a DC voltage source and submerging the first opening in a plating bath including ions of a selected metal.

58. (New) The method in accordance with Claim 57 wherein the selected metal comprises metal selected from a group consisting of gold, silver, platinum, platinum-iridium, and titanium.

59. (New) The method in accordance with Claim 56 further comprising:

creating a second opening in the wall leading to the embedded conductor;

electroplating material within the second opening to form a second conductive link for electrically connecting the embedded conductor to the outer surface of the body member; and

forming the electrode onto the outer surface of the body member to electrically connect to the second conductive link.

60. (New) In a neurostimulating lead of a type comprising, an elongated body member having a proximal end, a distal end and a wall, and having a conductor within the wall of the body member and extending from the proximal end to the distal end of the body member, a method of connecting the conductor to an electrode, the method comprising:

before forming the electrode on the distal end of the body member, creating a first tunnel and a second tunnel in the wall leading to the conductor;

providing a first conductive link through the first tunnel and a second conductive link through the second tunnel to electrically connect the conductor to an outer surface of the wall; and

forming the electrode on the outer surface of the wall so as to establish electrical contact with the first conductive link and the second conductive link.

61. (New) The method in accordance with Claim 60 wherein providing the first conductive link further comprises applying a conductive epoxy in the first opening, and forming the second conductive link further comprises applying a conductive epoxy in the second opening.

62. (New) The method in accordance with Claim 60 wherein the first conductive link and the second conductive link are formed by electroplating.

63. (New) The method in accordance with Claim60 wherein the electrode is formed by depositing multiple layers of metal having a composite thickness of less than about 350 microns.